

REMARKS

Favorable consideration and allowance of claims 1-28 are respectfully requested in view of the foregoing amendments and the following remarks.

The rejection under 35 U.S.C. § 103(a) of claims 1-28 over Enachescu et al. (US 6,840,666) in view of Nanri et al. (US 6,024,904) is respectfully traversed.

By the present Reply, claim 23 has been amended to further define the claimed method.

Applicants submit that there is no teaching, suggestion or motivation to combine the teachings of Enachescu et al. and Nanri et al.

Enachescu et al. relates to a method for finding defects (including shorts and opens (see col. 2, lines 9-10)) of pixels of liquid crystal display (LCD) panels (see col. 1, lines 34-36). Each pixel forms a circuit (see Fig. 2 of Enachescu et al.), and the defects of such pixel may be caused by various factors besides shorts and opens (see col. 2, lines 22-26 of Enachescu et al.). In other words, Enachescu et al. discloses an inspection of each pixel (a circuit) by infrared thermography to see if each pixel as a whole is defective. This inspection does not necessarily mean an inspection of disconnections in the conductive wire pattern of an LCD panel. In other words, a defective pixel does not necessarily have a conductive wire disconnection, i.e., Enachescu et al. does not differentiate between conductive wire disconnection defects and other defects in the pixels.

Nanri et al. is directed to a method for making an antifogging window plate including conductive lines. As described above, however, Enachescu et al. is directed to determining defects in pixels as a whole, regardless of whether the defects are in conductive wires. Moreover, Nanri et al. is unrelated to determining defects. Therefore, in light of Enachescu's disclosure of detecting defects in pixels as a whole, regardless of defects in the conductive wires, it would not have been obvious to one of ordinary skill in the art at the time of the invention to use the Enachescu et al. device and method on the antifogging conductive wire pattern of Nanri et al. to detect defects in the wire pattern.

Accordingly, independent claims 1, 8, 12, 20 and 23, as well as their respective dependent claims, are patentable.

Applicants further submit that the combination of Enachescu et al. and Nanri et al. fails to teach or suggest all of the limitations of independent claim 23. The Office Action refers to col. 10, lines 23-65 of Enachescu et al. and remarks that the binarization in Enachescu et al. can be limited to either type, position or size of the defect. Thus, the Office Action seems to interpret in Enachescu et al. that the binarization of Enachescu et al. can be limited to a certain area, based on or depending on type, location and size of the defects or possible defects. Applicants respectfully disagree, as explained below.

According to claim 23, all of the conductive wires 2 (See, e.g., Fig. 3) are parallel with each other (see the preamble of claim 23). The claimed inspection portion 10 (see the step (c) of claim 23) covers a portion of each conductive wire. Therefore, it becomes simple and easy to find disconnection of the entirety of all the conductive wires by the claimed binarization (see the step (d) of claim 23) of only the inspection portion, irrespective of type, location and size of the defects or possible defects. In other words, according to the claimed invention of claim 23, even if disconnection is not in the area of the claimed inspection portion, but is in the remaining area, such vehicular plate glass can be judged as having disconnection. Thus, it is possible by a single inspection according to the claimed invention to find disconnection of the entirety of the conductive wires by using the image of only the claimed inspection portion.

Once the disconnection is found in the claimed invention of claim 23, a vehicular plate glass having such disconnection can easily be removed from a production line. Then, the defective conductive wires can be removed from the glass substrate and then scrapped, and the glass substrate can be reused. Thus, the claimed method of claim 23 is a fast and efficient inspection method that is matched with a high-speed production line that produces almost no defective conductive wires. Thus, the claimed method is an effective method for inspecting

the existence or nonexistence of disconnection of the conductive wires, regardless of the position of disconnection.

In Enachescu et al., if the binarization is limited to a certain area, it is natural that the finding of the defect is limited to the certain area. Each pixel in an LCD in Enachescu et al. is evaluated to determine whether any defects exist in the pixels. After the defects are determined, selected defect artifacts can be eliminated. *See col. 10, lines 23-34.* In other words, Enachescu et al. discloses filtering out certain artifacts, based on their position, after images are obtained from the pixels. By contrast, the method according to claim 23 subjects only the inspection portion of the image to binarization and determines whether a disconnection exists anywhere in the conductive wires of the vehicular plate glass, based on the binarized image of only the inspection portion. Thus, teachings of Enachescu et al. are completely different from the claimed invention of claim 23. Moreover, Nanri et al. fails to make up for the deficiencies of Enachescu et al. Therefore, Applicants submit that claims 23-28, which have the above-mentioned unique features, are unobvious over the combination of Enachescu et al. and Nanri et al.

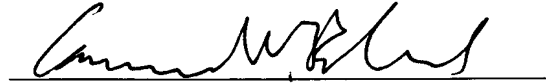
For the reasons discussed above, Applicant respectfully submits that all claims herein distinguish over the cited references and are allowable.

If there are any questions regarding this amendment or the application in general, a telephone call to the undersigned would be appreciated since this should expedite the prosecution of the application for all concerned.

If necessary to effect a timely response, this paper should be considered as a petition for an Extension of Time sufficient to effect a timely response, and please charge any deficiency in fees or credit any overpayments to Deposit Account No. 05-1323 (Docket #038788.52620US).

Respectfully submitted,

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A handwritten signature in black ink, appearing to read "J. D. Evans", is written over a horizontal line.

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